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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,904	12/18/2001	Andre Zaccarin	42390.P13241	5185

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John Patrick Ward  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
Seventh Floor  
12400 Wilshire Boulevard  
Los Angeles, CA 90025-1026

EXAMINER

SONG, JASMINE

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 11/05/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/024,904

Applicant(s)

ZACCARIN ET AL.

Examiner

Jasmine Song

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **Detailed Action**

1. Claims 1-21 are represented for examination.

### **Specification**

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### **Drawings**

3. The drawings filed on 04/29/2002 have been approved by the Examiner.

### **Oath/Declaration**

4. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

### **Title**

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### **Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Sherburne JR., US 2002/0169990 A1.

Regarding claims 1, 8 and 15, Sherburne teaches that a method comprising: determining a first memory buffer level (it is taught as the low water mark of the FIFO) for at least one memory buffer (a buffer 318 as shown Fig.2) providing data to digital circuitry (it is taught as the processor 320), determining a second memory buffer level (it is taught as the high water mark of the FIFO) for a memory buffer (a buffer 324 as shown Fig.2), the second memory buffer level being set greater than the first memory buffer level (the high water mark of the FIFO 324 is set greater than the low water mark of the FIFO 318), monitoring data buffer levels in memory is taught as the buffer 318 provides a buffer fill level feedback signal to the controller 322 such as BUFFER\_FULL, BUFFER\_EMPTY, and switching digital circuitry from a first state to a second state is taught as the controller 322 vary the clock signal to the processor 320 to decrease the processing speed of the processor according to the specification of page 6, 0017, lines 7-9 when the monitored data buffer level (BUFFER\_FULL) is greater than the second

memory buffer level (the high water mark, col.3, section 0030), and switching the digital circuitry from a second state to a first state is taught as the controller 322 vary the clock signal to the processor 320 to increase the processing speed of the processor when the monitored data buffer level (BUFFER\_EMPTY) is less than the first memory buffer level (the low water mark, col.4, section 0035 and col.5, section 0039).

Regarding claims 2, 9 and 16, Sherburne teaches further comprising switching the digital circuitry between additional states (it is taught as varying the clock frequency to the processor) in response to changing levels of memory buffer data in at least one memory buffer (it is taught as in response to changing the FIFO in between FULL and EMPTY, col.2, section 0022).

Regarding claims 3, 10 and 17, Sherburne teaches the first and second memory buffer level are augmented by at least one additional memory buffer level (FIFO\_FULL or FIFO\_EMPTY or in between) to permit greater switching control of the digital circuitry between states in response to monitored data buffer levels (col.4, section 003 and col.5, section 0039).

Regarding claims 4, 11 and 18, Sherburne teaches switching the digital circuitry from the first state to the second state further comprises adjusting clock frequency of the digital circuitry (col.2, section 0021, last four lines).

Regarding claims 5, 12 and 19, Sherburne teaches switching the digital circuitry from the first state to the second state further comprises adjusting voltage of the digital circuitry (col.2, section 0021, last four lines).

Regarding claims 6, 13 and 20, Sherburne teaches the digital circuitry is a processor (for instance, col.2 section 0022) directly controlled to switch between states (the processor as shown in Fig.1 and 2).

Regarding claims 7, 14 and 21, Sherburne teaches the digital circuitry is a processor controlled to switch between states in response to interactions with a power management controller (col.2, section 0015 and section 0021).

### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilcox et al.,	US 6510099 B1
Merritt	US 6205078 B1
Iizuka	US 2001/0043353 A1

9. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

10. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 703-305-7701. The examiner can normally be reached on 8:00-5:30 (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703-306-2903. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Jasmine Song



Patent Examiner

October 31, 2003



Mano Padmanabhan

10/31/03

Supervisory Patent Examiner

Technology Center 2100